Mr. James R. Roark Rieter Automotive North America, Inc. 101 West Oakley Ave. Lowell, IN 46356

Re: Re: 089-14668

Second Minor Permit Modification to

Part 70 089-6629-00013

Dear Mr. Roark:

Rieter Automotive North America, Inc. was issued a Title V permit on June 16, 1999 for the operation of a stationary automotive sound deadening products manufacturing plant. A letter requesting changes in facility descriptions and some permit conditions was received on July 20, 2001. This modification relates to the addition of a natural gas fired steam generator to the plant. A minor permit modification is hereby approved as described in the attached Technical Support Document.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Madhurima Moulik, at (800) 451-6027, press 0 and ask for Madhurima Moulik or extension 3-0868, or dial (317) 233-0868.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

#### Attachments

mm

cc: File - Lake County

U.S. EPA, Region V

Lake County Health Department Northwest Regional Office

Air Compliance Section Inspector - Rick Massoles/Ramesh Tejuja

Compliance Data Section - Karen Nowak

Administrative and Development - Janet Mobley Technical Support and Modeling - Michele Boner

## PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT

#### Rieter Automotive North America, Inc. 101 West Oakley Avenue Lowell, Indiana 46356-2206

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T089-6629-00013	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: June 16, 1999

2 <sup>nd</sup> Minor Permit Modification No: 089-14668-00013	Pages changed: 5, 10, 47c, 47d		
Issued by: Paul Dubenetzky, Chief Permits Branch	Issuance Date: October 10, 2001		

#### D.7 FACILITY OPERATION CONDITIONS - 8.38 mmBtu/hr natural gas fired boiler

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter [326 IAC 6-2-2]

#### **Compliance Determination Requirements**

D.7.2 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.3 Monitoring

#### D.8 FACILITY OPERATION CONDITIONS - One (1) barrier/foam recovery process line,

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Particulate Matter (PM) [326 IAC 6-1-2]

#### **Compliance Determination Requirements**

- D.8.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.8.3 Particulate Matter (PM)

#### **Compliance Monitoring Requirements**

- D.8.4 Baghouse Inspections
- D.8.5 Broken or Failed Bag Detection

#### Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.6 Record Keeping Requirements

#### D.9 FACILITY OPERATION CONDITIONS One (1)14.3 million British thermal units per hour

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Particulate Matter [326 IAC 6-2-2]

#### **Compliance Determination Requirements**

D.9.2 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.3 Monitoring

#### Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)]

- D.9.4 Record Keeping Requirements [326 IAC 12 and 40 CFR 60.48c]
- D.9.5 Reporting Requirements

#### **Certification Form**

**Emergency/Deviation Occurrence Report** 

**Natural Gas Fired Boiler Certification** 

**Quarterly Report Form** 

**Quarterly Compliance Monitoring Report Form** 

- (E) One (1) airlay,
- (F) One (1) classifier,
- (G) One (1) reclaim screen,
- (H) One (1) picker,
- (I) One (1) resin distributor, and
- (J) Two (2) aspirator tables.
- (11) One (1) foam part cell, identified as Foam Cell Injection Molding, under construction 1997/1998, with a maximum capacity of 4,273.1 pounds of trimmed parts and scrap per hour, consisting of the following equipment:
  - (A) Two (2) chemical storage tanks, 8,000 gallon capacity each,
  - (B) One (1) metering system,
  - (C) One (1) robotic injector, and
  - (D) One (1) nitrogen blank system for chemical storage tanks.
- (12) One (1) natural gas-fired 350 BHP VAPOR Circulate steam generator, with a maximum heat input of 14.3 MMBTU/hr.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) One (1) 8.38 million British thermal units per hour (mmBtu/hr) natural gas fired boiler, installed prior to 1983, identified as FCU-5;
- (2) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than or equal to 12,000 gallons.
- (3) Fifty-two (52) natural gas fired space heaters and four (4) air makeup units with a combined maximum heat input capacity of 54.75 million British thermal units per hour (mmBtu/hr), each with individual heat capacities less than ten (10) million British thermal units. This equipment is considered to be part of the Direct Heating and Fuel Combustion Units,
- (4) VOC and HAP vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids,
- (5) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings,
- (6) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment,
- (7) Closed loop heating and cooling systems,
- (8) Water based adhesives that are less than or equal to 5% by volume of VOC's excluding HAPs,
- (9) Replacement of repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment,

(10) Paved and unpaved roads and parking lots with public access,

Rieter Automotive North America Inc. Lowell, Indiana Permit Reviewer: Catherine Moore 2<sup>nd</sup> Minor Permit Modification 089-14668 Modified by: Madhurima D. Moulik Page 47c of 53 OP No. T089-6629-00013

#### **SECTION D.9**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

One (1)14.3 million British thermal units per hour (mmBtu/hr) natural gas fired 350 BHP VAPOR Circulate steam generator.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.9.1 Particulate Matter (PM) [326 IAC 6-2-2]

Pursuant to 326 IAC 6-2-2 (Emission Limitations for Facilities Specified in 326 IAC 6-2-1(d)), the particulate matter emissions from the one (1) 14.3 mmBtu/hr boiler shall be limited to 0.55 pounds particulate matter per million British thermal unit (lb/mmBtu).

#### **Compliance Determination Requirements**

#### D.9.2 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Particulate Matter (PM) limit specified in Condition D.9.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.9.3 Monitoring

Monitoring of this facility is not required by this permit. However, any change or modification to this facility as specified in 326 IAC 2-1 may require this facility to have monitoring requirements.

#### Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)]

#### D.9.4 Record Keeping Requirements [326 IAC 12 and 40 CFR 60.48c]

- (a) Pursuant to 40 CFR 60.48c(a), the permittee shall submit notification of the date of construction, anticipated startup, and actual startup, as provided by § 60.7 of this part for the one (1) 14.3 million British thermal units per hour natural gas fired boiler. This notification shall include:
  - (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
  - (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.
  - (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
  - (4) Notification if an emerging technology will be used for controlling SO2 emissions. The administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or b(1), unless and until this determination is made by the administrative.

(b) Pursuant to 40 CFR 60.48c(g), and a USEPA memo dated February 20, 1992, the Rieter Automotive North America Inc.

2nd Minor Permit Modification 089-14668

Lowell, Indiana

2nd Modified by: Madhurima D. Moulik

Page 47d of 53

OP No. T089-6629-00013

permittee shall record and maintain records of the amounts of natural gas combusted each month.

- (c) Pursuant to 40 CFR 60.48c(i), all records required under this section shall be maintained by the permittee for a period of two years following the date of such record.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.9.5 Reporting Requirements

Permit Reviewer: Catherine Moore

(a) An annual certification for the 14.3 million British thermal units per hour natural gas fired boiler shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent, no later than April 15 of each year.

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Minor Permit Modification to a Part 70 Operating Permit

#### **Source Background and Description**

Source Name:

Source Location: Rieter Automotive North America, Inc.

County: Lake SIC Code: 3714

Operation Permit No.: 089-6629-00013
Operation Permit Issuance Date: June 16, 1999
Permit Modification No.: 089-14668

Permit Reviewer: Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed a modification application from Rieter Automotive North America, Inc. relating to the operation of a stationary automotive sound deadening products manufacturing plant.

#### **New Emission Unit**

(1) One (1) natural gas-fired 350 BHP VAPOR Circulate steam generator, with a maximum heat input of 14.3 MMBTU/hr.

#### **Justification for the Modification**

The emissions would make the unit exempt according to 326 IAC 2-1.1-3. This rule states that no permit/source modification is necessary. However, the new applicable requirement for this source is an NSPS, and according to rule 326 IAC 2-1.1-4, if any federal law or regulations apply, the federal rule predominates. Pursuant to 326 IAC 2-7-12(b)(1)(E), modifications under the provision of Title 1 of the CAA cannot be minor permit modifications. EPA does not consider NSPS modifications that only include reporting or record-keeping requirements as Title 1 modifications. Therefore, the modification for this source, which is not a Title 1 modification under EPA guidelines, is classified as a minor permit modification.

#### **Existing Approvals**

The source was issued a Part 70 Operating Permit T 089-6629-00013 on June 16, 1999. The source has since received the following:

- (a) First Administrative Amendment No.: 089-11497, issued on November 24, 1999;
- (b) Second Administrative Amendment No: 089-12125, issued on April 20, 2000;
- (c) First Minor Permit Modification No: 089-12506, issued on September 26, 2000;
- (d) Third Administrative Amendment No: 089-12693, issued on October 17, 2000.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 20, 2000.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations.

#### **Potential To Emit of Modification**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)		
PM	0.5		
PM-10	0.5		
SO <sub>2</sub>	negligible		
VOC	0.3		
CO	5.3		
NO <sub>x</sub>	6.3		

#### **County Attainment Status**

The source is located in Lake County.

Pollutant	Status*		
PM-10	moderate non-attainment		
SO <sub>2</sub>	non-attainment(for portions)		
$NO_2$	attainment		
Ozone	severe non-attainment		
СО	maintenance attainment		
Lead	attainment		

<sup>\*</sup> Lowell, Indiana, is located in the portion of the county which is attainment for SO2 and unclassifiable for PM-10.

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe non-attainment for ozone.

(b) Lake County has been classified as maintenance attainment for CO. Therefore, the CO emission was reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### **Federal Rule Applicability**

- (a) The steam generator has a maximum heat input of 14.3 million Btu/hr. Therefore, it is subject to the New Source Performance Standard (40 CFR 60.40c, Subpart Dc) (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) because the heat input capacity is greater than ten (10) million British thermal units per hour, but less than one hundred (100) million British thermal units per hour. It was constructed in 1995 which is after the June 9, 1989 applicability date. The steam generator is subject to 40 CFR 60.48c(a) (Reporting and recordkeeping requirements). Pursuant to 40 CFR 60.48 (c)(g) and EPA guidelines, the source is required to maintain records of the amount of natural gas combusted per month. Pursuant to 40 CFR 60.48(c)(i), all records required under this section shall be maintained for a period of two years following the date of the record.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

#### State Rule Applicability - Entire Source

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

This source is a major source. However, the modification to this source is not significant, since the potential emissions of VOCs from the modification is not greater than 40 tons per year.

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Lake county and has the potential to emit more than ten (10) tons per year. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

The steam generator uses combustion for indirect heating, which is exempt from 326 IAC 6-3-2. Therefore, it is not subject to this rule.

326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1(d))

The particulate emissions from the steam generator shall be limited by the following:

 $Pt = 1.09/Q^{0.26}$ 

where:

Pt = Pounds of Particulate matter emitted per million BTU/hr heat input.

Q = Total source maximum operating capacity rating in million BTU/hr heat input.

For Q = 14.3 MMBTU/hr, Pt shall not exceed 0.55 lb/hr or 2.4 tons/yr. The new steam generator is in compliance with this requirement.

326 IAC 7-4-1.1 (Sulfur dioxide emission limitations: Lake county)

The new steam generator has a potential to emit less than twenty-five (25) tons per year of sulfur dioxide. Therefore, 326 IAC 7-4-1.1 does not apply.

#### **Compliance Requirements**

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements for the new steam generator.

#### **Proposed Changes to the Part 70 Operating Permit**

The following are the Minor Permit Modifications for this source (strikeout added to show the deletions and **bold** to show the additions):

- (1) The description of the new steam generator is added to Section A.2:
  - A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]
  - (11) One (1) foam part cell, identified as Foam Cell Injection Molding, under construction 1997/1998, with a maximum capacity of 4,273.1 pounds of trimmed parts and scrap per hour, consisting of the following equipment:
    - (A) Two (2) chemical storage tanks, 8,000 gallon capacity each,
    - (B) One (1) metering system,
    - (C) One (1) robotic injector, and

- (D) One (1) nitrogen blank system for chemical storage tanks.
- (12) One (1) natural gas-fired 350 BHP VAPOR Circulate steam generator, with a maximum heat input of 14.3 MMBTU/hr.
- (2) The section D.9 is added to the permit with the facility operating conditions for the new steam generator.

#### SECTION D.9

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

One (1)14.3 million British thermal units per hour (mmBtu/hr) natural gas fired 350 BHP VAPOR Circulate steam generator.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Particulate Matter (PM) [326 IAC 6-2-2]

Pursuant to 326 IAC 6-2-2 (Emission Limitations for Facilities Specified in 326 IAC 6-2-1(d)), the particulate matter emissions from the one (1) 14.3 mmBtu/hr boiler shall be limited to 0.55 pounds particulate matter per million British thermal unit (lb/mmBtu).

**Compliance Determination Requirements** 

D.9.2 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Particulate Matter (PM) limit specified in Condition D.9.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.9.3 Monitoring

Monitoring of this facility is not required by this permit. However, any change or modification to this facility as specified in 326 IAC 2-1 may require this facility to have monitoring requirements.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)]

- D.9.4 Record Keeping Requirements [326 IAC 12 and 40 CFR 60.48c]
- (a) Pursuant to 40 CFR 60.48c(a), the permittee shall submit notification of the date of construction, anticipated startup, and actual startup, as provided by § 60.7 of this part for the one (1) 14.3 million British thermal units per hour natural gas fired boiler. This notification shall include:
  - (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
  - (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.

- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
- (4) Notification if an emerging technology will be used for controlling SO2 emissions. The administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or b(1), unless and until this determination is made by the administrative.
- (1) Pursuant to 40 CFR 60.48c(g), and a USEPA memo dated February 20, 1992, the permittee shall record and maintain records of the amounts of natural gas combusted each month.
- (2) Pursuant to 40 CFR 60.48c(i), all records required under this section shall be maintained by the permittee for a period of two years following the date of such record.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.
- D.9.5 Reporting Requirements
- (a) An annual certification for the 14.3 million British thermal units per hour natural gas fired boiler shall be submitted to the address listed in Section C General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent, no later than April 15 of each year.
- (3) The Table of Contents is changed to add the Section D.9:

#### D.9 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Particulate Matter [326 IAC 6-2-2]

Compliance Determination Requirements
D.9.2 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] D.9.3 Monitoring

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)]

D.9.4 Record Keeping Requirements [326 IAC 12 and 40 CFR 60.48c]

D.9.5 Reporting Requirements

#### Conclusion

This permit modification shall be subject to the conditions of the attached Part 70 Minor Permit Modification No. 089-14668-00013.

## Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

Small Industrial Boiler

Company Name: Rieter Automotive North America, Inc.

Address City IN Zip: 101 West Oakley Ave.

CP: 089-14668 Plt ID: 089-00013

Reviewer: Madhurima D. Moulik

Date: Sep 18, 2001

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr

14.3 125.0

#### Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.5	0.5	0.0	6.3	0.3	5.3

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

# Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Small Industrial Boiler

**HAPs Emissions** 

Company Name: Rieter Automotive North America, Inc.

Address City IN Zip: 101 West Oakley Ave.

CP: 089-14668 Plt ID: 089-00013

Reviewer: Madhurima D. Moulik

Date: Sep 18, 2001

#### HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.313E-04	7.503E-05	4.689E-03	1.125E-01	2.126E-04

#### HAPs - Metals

Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.126E-05	6.878E-05	8.753E-05	2.376E-05	1.313E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.